

China's Agricultural Trade in 1996: Commodity Structure, Geographical Distribution, and Its Role in U.S. and World Agricultural Trade

China's agricultural imports in 1996 decreased by 18.5 percent from 1995, while exports remained almost the same as the previous year. China continues to be a net importer of grains and other land-intensive bulk products and a net exporter of horticultural and consumer-oriented agricultural products. This trade pattern also dominated U.S.-China agricultural trade. U.S. farm exports to China declined from 1995, but still remained above \$2 billion. [Zhi Wang (202)219-0993]

In 1996, China's agricultural trade (exports and imports) reached US\$20.3 billion, a decrease of nearly 10 percent from 1995. The decline stemmed from lower imports which fell 18.5 percent to US\$9.7 billion. Exports increased 0.1 percent to \$10.6 billion. The decrease in imports came from a sharp decline in the purchase of grains, while the small increase in exports stemmed from an increase of corn, rice, and processed intermediate product sales to neighboring countries. China's agricultural net trade structure is consistent with its resource endowments. Land-intensive bulk and processed intermediates constituted the major portion of its agricultural imports, while labor-intensive horticultural and consumer-oriented products were the largest part of its agricultural exports. In 1996, China shipped more than 65 percent of its agricultural exports to neighboring Asian markets. About half of China's agricultural imports came from the United States, Canada, and Australia. U.S. agricultural exports to China in 1996 declined from their 1995 peak but still remained above \$2 billion.

On July 1, 1997, Hong Kong became a "Special Administrative Region" of the People's Republic of China. Hong Kong will continue to maintain its freeport status and customs procedures for 50 years or at least until 2047. In subsequent years it will be useful to begin to treat China and Hong Kong together as one en-

¹Starting this year ERS was able to obtain China's Customs Statistics in an electronic format at the 8-digit HS level of detail, thus permitting aggregation of the data according to the classifications of USDA's FATUS. Therefore, the data may be different from previous issues of this report and official data from China because of different commodity classifications.

²Bulk commodities are unpackaged products that are inexpensive to ship, including grains, oilseeds, plant-based fibers such as cotton, raw rubber, and unmanufactured tobacco. Land-use accounts for a significant share of the production costs for bulk production, especially compared with the other commodity groups. Processed intermediates are goods derived from bulk commodities and need further processing for human consumption. They include flour, feed, live animals, animal fats and oils, as well as animal-based fibers such as wool. Horticultural products are consumer-ready, unprocessed fresh commodities such as fresh fruit, vegetables, and flowers. They often require special handling such as containerization and refrigeration. Consumer-ready processed products are commodities that have been significantly transformed with high value-added such as preserved vegetables, fruits and nuts, fresh and frozen meats, eggs, dairy products, processed meat, and beverages.

tity, for example Greater China. Currently, however, there are great differences between China and Hong Kong's economy: income levels, consumption patterns, economic structures, business organizations, tariff practices, and factor endowments. Also, there are problems in treating Hong Kong's re-export of agricultural commodities to China. Given these differences and data problems, the analysis of China and Hong Kong agricultural trade is separated in two different articles. For a short report on Hong Kong and its agricultural trade, see the article on page 44. This article will focus on the structure of China's agricultural trade in 1995 and 1996. In next year's report, we will analyze the issue of Hong Kong's re-export of agricultural commodities to China.

Commodity Structure of China's Agricultural Trade

In 1996, China's agricultural imports fell 18.5 percent from 1995 because government policies pushed farmers to increase the area sown to grain crops, farmers reaped a record grain crop, and the government tightened control on grain imports. Grain imports decreased by about 47 percent, with corn falling by more than 90 percent, followed by rice (54 percent), and wheat (29 percent). Cotton and vegetable oil imports also fell by 12 and 25 percent, respectively. On the export side, grain exports nearly doubled from 1995 (93 percent in quantity terms, 168 percent in value terms). However, China still remained a net importer of land-intensive products such as grain, cotton, and vegetable oil from the world market. In calendar year 1996, net grain imports were 9.59 million metric tons (half the 1995 level), with more than 8 million metric tons wheat.

To provide a better understanding of China's agricultural trade and the underlying forces shaping its structure, we aggregated China's trade data for 1995 and 1996 into four broad categories based on their factor intensity, degree of processing, and readiness for direct consumption, using trade data in the "Harmonized Commodity Description and Coding System" (HS) from China's General Administration of Customs.

Table 2 presents China's total agricultural trade in 1995 and 1996, which is separated into four major components: bulk commodities; processed intermediate goods; horticultural products; and consumer-ready goods.²

Table 2 -- Total and agricultural trade in China, 1995 and 1996 (million\$US)

	Exports			Imports			Balance		
	1995	1996	Change	1995	1996	Change	1995	1996	Change
Total trade	148,780	151,066	1.5	132,084	138,838	5.1	16,696	12,228	(26.8)
Total agriculture	10,577	10,588	0.1	11,870	9,669	(18.5)	(1,293)	919	(171.1)
Agriculture share	7.1	7.0	(1.4)	9.0	7.0	(22.5)	na	na	na
Bulk commodities	1,045	1,081	3.5	6,469	4,608	(28.8)	(5,424)	(3,527)	(35.0)
Processed intermediates	3,647	3,732	2.3	4,891	4,592	(6.1)	(1,243)	(860)	(30.8)
Horticultural products	1,538	1,495	(2.8)	167	145	(12.8)	1,371	1,350	(1.6)
Consumer-ready products	4,347	4,280	(1.5)	344	323	(6.2)	4,003	3,957	(1.1)

Source: Aggregated from China's Customs Statistics (8 digit HS) and is consistent with USDA's FATUS classification.

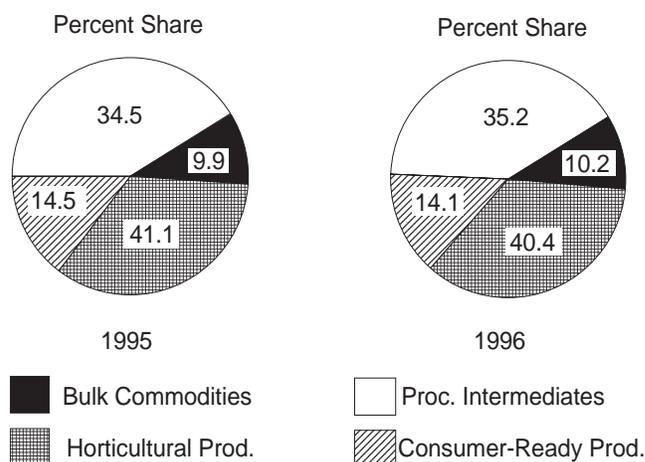
It shows that in terms of total agricultural trade, China shifted from a net importer in 1995 with a deficit of \$1.3 billion to a net exporter in 1996 with a surplus of \$0.9 billion. However, at the disaggregated level, it continues to be a net importer of bulk and processed intermediates, and a net exporter of horticultural and processed consumer-ready goods. The overall net agricultural trade position of China depends on which one is bigger.

Clear economic principles underpin these net trade data. They show that China's agricultural trade behavior is consistent with its factor endowments for food production and international comparative advantage. It is well known that China is a labor abundant country with a relatively poor endowment of arable land. It has to feed 22 percent of the world's population with only 9 percent (Crook, 1993) of the world's arable land. According to standard trade theory, a country tends to be a net exporter of goods which require relatively intensive use of its relatively abundant factors of production, a net importer of commodities which need relatively intensive use of the country's relatively scarce factors.

By importing more land-intensive products such as grains, oilseeds, cotton, and other bulk commodities, and semiprocessed goods for further processing and re-exporting, and by exporting more labor-intensive, more highly processed, high value-added agricultural products to the international market, China is able to increase employment opportunities for its huge rural labor force, enhance its efficiency of food production as a whole, and increase farm income.

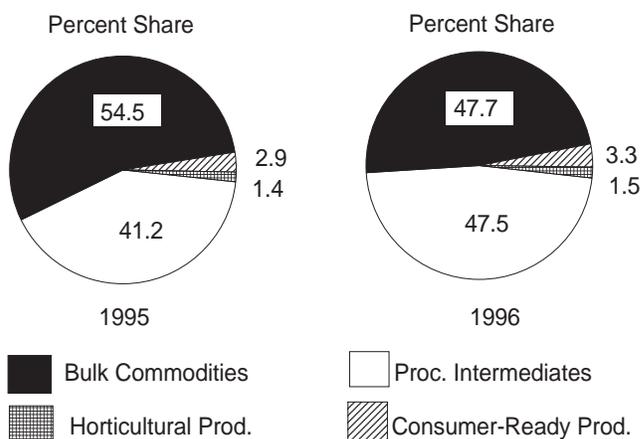
³All trade data in this article, except U.S.- China bilateral, come from China's customs statistics, which is what China officially reported. It may be different from data from other sources such as FAO. Based on Hong Kong trade statistics, there were \$1.74 billion agricultural products re-exported to China from Hong Kong in 1995, it is not reflected in China's import data reported by China's Customs Statistics. We are not certain how China's Customs General Administration handles such re-export data from Hong Kong. If China did not include such re-exports in their trade statistics, the actual structure of China's imports may somehow be different from what we reported here. However, it can not alter the basic conclusion from this article.

Figure 3
Structure of China's agricultural exports



Source: Aggregated from China's Customs Statistics (in 8-digit HS) consistent with classification of USDA FATUS data.

Figure 4
Structure of China's agricultural imports



Source: Aggregated from China's Customs Statistics (in 8-digit HS) consistent with classification of USDA FATUS data.

Figures 3 and 4 show the relative size of the four broad commodity groups for China's agricultural exports and imports in the last 2 years. The structure of China's agricultural trade was stable in spite of the variations in quantities and prices during the last 2 years. About 40 percent of China's agricultural exports were consumer-ready processed goods, while nearly 95 percent of its agricultural imports were bulk commodities and processed intermediates. The only significant structural difference between 1995 and 1996 is the substitution between bulk and processed intermediates.

The import share of bulk goods fell 6.8 percentage points in 1996, while the import share of processed intermediates increased by 6.3 percentage points. The reason for this change is that imports of bulk products fell dramatically compared with processed intermediates (29 over 6 percent), thus increasing the latter's share in total imports. These may be partially explained by the market response to the central government's intervention policies.

The government strongly encouraged farmers to expand area sown to grain crops in late 1995 and 1996 and tightened control on grain imports in 1996. However, this only reduced bulk commodity imports, but the import demands of its close substitutes (processed intermediates) still remain high. Market forces made the adjustment consistent with China's factor endowments. This implies that even with strong governmental intervention, economic outcomes increasingly depend on market forces in China, because 18 years of economic reform have substantially transformed China's economy.

Future domestic economic reform and foreign trade liberalization as China implements its World Trade Organization commitments will reinforce these market forces and could well push China's agricultural production and trade structure along this path for years to come. In 1997, therefore, China will remain a net exporter of horticultural and

consumer-ready processed commodities, and a net importer of bulk and processed intermediate agricultural products, despite lower grain imports in 1996 and 1997 from 1995 because of increased domestic grain production in the recent 2 years.

Geographical Distribution of China's Agricultural Trade

The geographical distribution of China's total agricultural trade for 1995 and 1996 is shown in table 3. The United States, Australia and New Zealand, the Association of South East Asia Nations, ([ASEAN7], includes Indonesia, Malaysia, Thailand, Philippines, Singapore, Burma, and Vietnam), Canada, and the Latin American Newly Industrialized Countries ([LNIC], includes Argentina, Chile, Brazil, and Mexico) were the top five agricultural suppliers to China. Half of China's agricultural exports went to Japan and Hong Kong. The European Union (EU15), ASEAN7, and the two Koreas are the next three largest markets for China's agricultural exports, accounting for another 30 percent of China's sales abroad in 1996.

There were great variations in the agricultural trade flows between China and its major trade partners from 1995 to 1996. For instance, China's agricultural imports from its traditional larger suppliers, such as the EU and ASEAN7 countries, fell by 68 and 47 percent, respectively, while from AUS/NZL and LNICs increased by 55 and 46 percent, respectively, making them China's second and third largest agricultural goods suppliers after the United States. However, the direction of net agricultural trade seems quite stable.

Figures 5 and 6 show China's net agricultural trade flows with its major trade partners. China was a net importer of bulk and processed intermediate agricultural products from the United States, Canada, Australia and New Zealand, ASEAN7, LNICs, and the rest of the world. It was a net exporter of almost all agricultural goods to Japan, Hong Kong, Taiwan, Russia, and Korea in 1995 and 1996. Only China's

Table 3--Geographical distribution of China's agricultural trade, 1995 and 1996

	Exports		Imports		Balance	
	1995	1996	1995	1996	1995	1996
	Million\$US					
United States	424	505	3,308	2,060	(2,884)	(1,555)
Canada	64	73	1,110	1,014	(1,046)	(940)
AUS/NZL	60	61	1,170	1,815	(1,111)	(1,754)
LNICs	36	53	935	1,371	(899)	(1,318)
ASEAN7	1,062	861	2,371	1,314	(1,309)	(454)
ROW	716	768	1,291	1,014	(575)	(246)
Russia	470	441	97	94	373	347
EU15	1,355	1,483	1,096	347	259	1,136
Japan	2,858	3,103	130	141	2,728	2,962
Korea 1/	555	786	97	80	458	706
Hong Kong	2,578	2,117	99	81	2,479	2,036
Taiwan	239	185	100	79	139	106
South Asia	161	153	67	258	95	(105)
Total	10,577	10,588	11,870	9,669	(1,293)	919

Source: Aggregated from China's Customs Statistics (8 digit HS) and is consistent with USDA's FATUS classification.
1/ Korea includes South and North Korea.

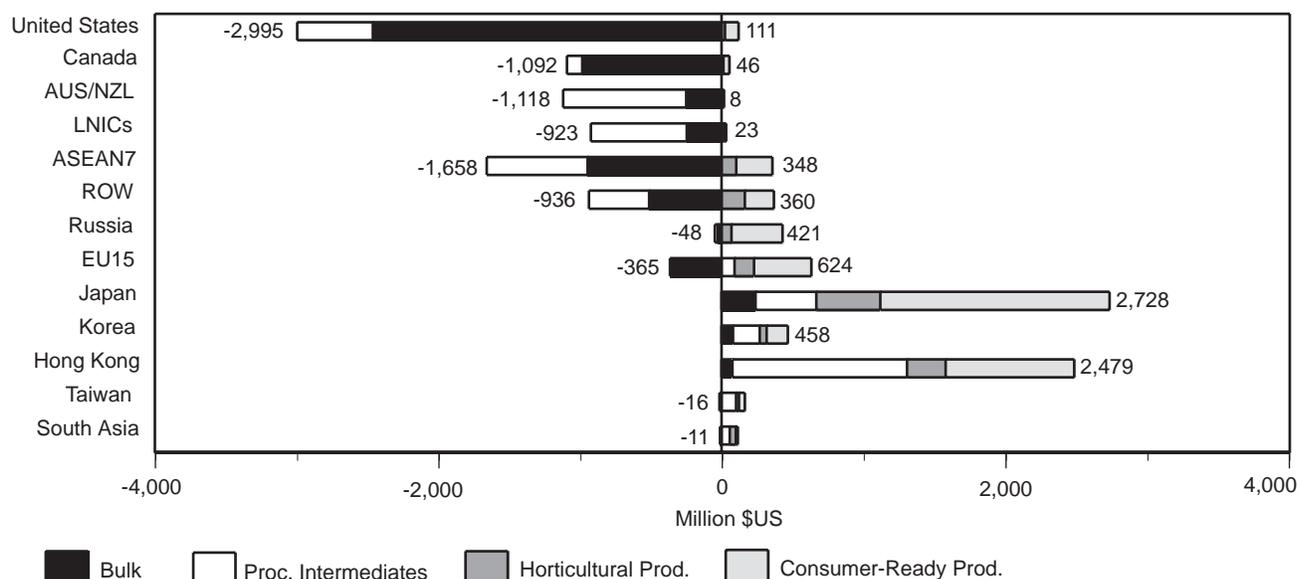
Table 4--Market share of China's agricultural imports, 1995-96

Country	Total		Bulk		Processed Intermediates		Horticultural Products		Consumer-Ready Products	
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
	Percent share									
United States	27.9	21.3	38.4	35.2	14.5	7.8	6.8	17.8	31.1	17.0
Canada	9.3	10.5	15.3	19.5	2.3	2.0	0.8	12.3	1.1	1.8
AUS/NZL	9.9	18.8	4.1	19.6	17.9	18.7	2.0	14.5	7.9	9.6
LNICs	7.9	14.2	3.8	2.8	14.0	26.9	0.5	0.2	0.7	2.1
ASEAN7	20.0	13.6	17.7	9.4	21.9	16.8	70.2	43.2	12.1	14.5
ROW	10.6	10.4	10.2	9.1	11.7	12.4	10.0	2.2	2.4	2.2
Russia	0.8	1.0	0.9	0.9	0.8	1.1	0.0	0.1	0.3	0.2
EU15	9.2	3.6	8.6	1.3	10.1	5.0	1.3	1.7	13.8	17.2
Japan	1.1	1.5	0.0	0.0	1.6	1.7	2.1	1.6	13.7	18.5
Korea 1/	0.8	0.8	0.2	0.1	1.3	1.3	3.0	3.5	4.3	3.6
CHN3	2.0	1.8	0.5	0.1	3.1	2.7	2.9	2.0	12.5	13.2
South Asia	0.6	2.7	0.3	1.9	0.9	3.6	0.4	1.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Aggregated from China's Customs Statistics (8 digit HS) and is consistent with USDA's FATUS classification.
1/ Korea includes South and North Korea.

Figure 5

China's net agricultural trade with major countries in the world, 1995



Source: Aggregated from China's Customs Statistics (in 8-digit HS) consistent with classification of USDA FATUS data.

agricultural trade with South Asian countries changed from surplus in 1995 to a deficit in 1996 because of nearly tripled imports (from a very low level) from those countries. This trade pattern seems consistent with the abundance of agricultural production resource endowments in those countries relative to China. There is no reason to believe this trade pattern will change in the near future providing there is no dramatic technology progress and strong government intervention in China and its partner countries.

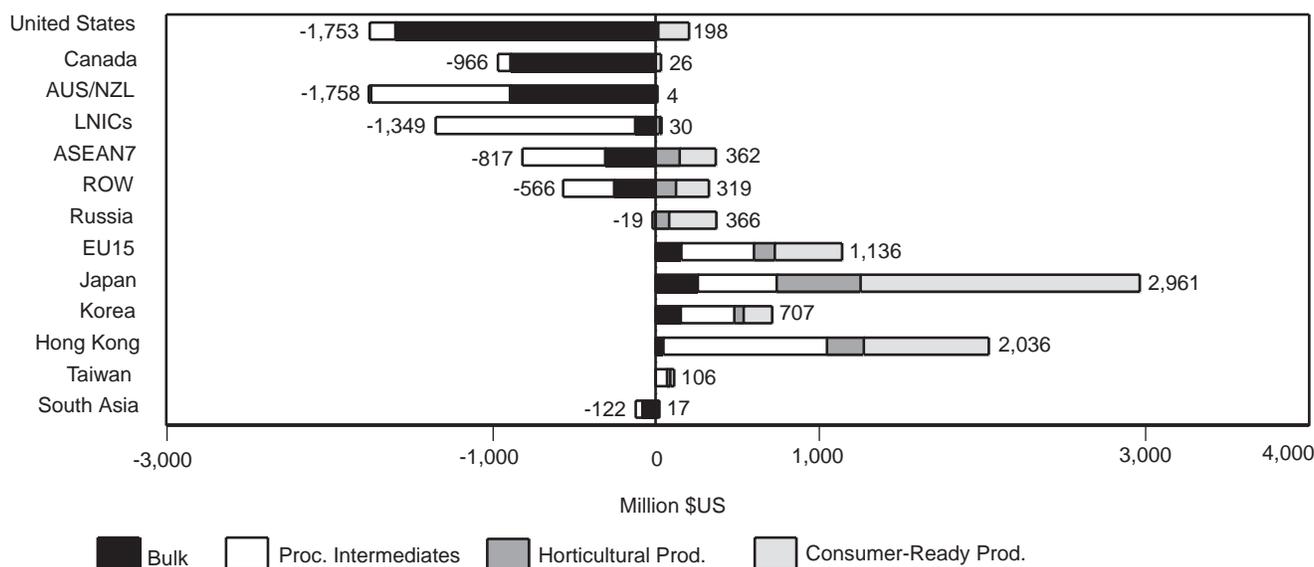
Table 4 presents market shares of China's agricultural imports according to suppliers, while table 5 shows China's agricultural exports by destination for both 1995 and 1996. There are several notable market structure changes in 1996. First, Australia

and New Zealand became China's second largest agricultural product suppliers, occupying 19 percent of the import market, only 2 percent behind the United States. Australia gained in all four types of commodity markets, with bulk goods gaining the most, from 4 percent in 1995 to nearly 20 percent in 1996, becoming one of the three dominant players in China's bulk goods import market (the other two were the United States and Canada, occupying 35 and 20 percent, respectively).

Second, LNICs replaced ASEAN7 countries to become the largest supplier of processed intermediates, taking 27 percent of the market, Australia also increased its share, continually ranking second in this market. The

Figure 6

China's net agricultural trade with major countries in the world, 1996



Source: Aggregated from China's Customs Statistics (in 8 digit HS) consistent with classification of USDA FATUS data.

Table 5--China's agricultural export share by destination, 1995-96

Country	Total		Bulk		Processed Intermediates		Horticultural Products		Consumer-Ready Products	
	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
	Percent share									
United States	4.0	4.8	4.9	4.7	2.1	2.4	4.7	5.4	2.3	2.8
Canada	0.6	0.7	0.6	0.6	0.6	0.8	0.1	0.4	1.0	1.3
AUS/NZL	0.6	0.6	0.5	0.6	1.2	1.1	0.2	0.2	0.4	0.5
LNICs	0.3	0.5	0.3	0.4	0.1	0.2	0.3	0.3	1.2	1.8
ASEAN7	10.0	8.1	11.3	8.9	18.8	11.4	9.8	7.1	14.4	14.1
ROW	5.9	6.4	4.7	5.7	14.3	15.3	3.6	6.0	11.0	8.1
Russia	4.4	4.2	3.5	2.5	2.9	3.8	0.5	0.9	4.6	5.6
EU15	12.8	14.0	10.6	9.8	18.1	20.2	16.0	18.1	9.0	8.8
Japan	27.0	29.3	31.1	29.7	23.2	24.2	13.8	15.0	29.6	34.4
Korea 1/	5.3	7.4	5.8	7.7	9.0	14.6	6.9	10.4	3.5	4.2
CHN3	27.5	22.5	25.8	27.7	8.6	5.1	41.2	32.9	20.3	17.2
South Asia	1.5	1.4	1.1	1.7	0.9	0.8	2.8	3.4	2.8	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Aggregated from China's Customs Statistics (8 digit HS) and is consistent with USDA's FATUS classification.

1/ Korea includes South and North Korea.

United States lost significantly, its share fell from 15 to 8 percent. Third, LNICs and ASEAN7 were the third and fourth largest agricultural suppliers to China in 1996, but were quite different in what they shipped. LNIC exports dominated by processed intermediates, which were either land-intensive and/or less expensive to transport, while ASEAN7's exports were more diversified. ASEAN7s played important roles in all the four commodity markets and supplied nearly half of China's horticultural imports because of their proximity to China relative to the LNICs.

Finally, EU, Japan, and Hong Kong were minor suppliers in terms of total farm products. However, they were important players in China's expanding consumer-ready goods market, occupying 17, 18, and 10 percent of the market, respectively. These market-share data indicate that in the bulk commodity market, competition with the United States for market share comes mainly from Australia and Canada (for wheat and barley, China's imported rice mainly is from ASEAN countries). In the processed intermediates market, Australia, LNICs and ASEAN7 countries are major competitors with the United States. Tough competition is expected in the consumer-ready processed commodity market. The EU, Japan, Hong Kong, and

ASEAN7 countries took a large share of this market and were able to compete with U.S. products.

On the export side, Japan, Hong Kong, and Taiwan were the major markets for China's agricultural products. However, the importance of the Hong Kong and Taiwan market declined in 1996 because political tensions reduced China-Taiwan trade flows. China's agricultural exports increased to the Japanese market, especially for its horticultural and consumer-ready commodities. In 1996, Japan alone absorbed more than one-third of China's exports.

Although Hong Kong still remained the largest processed-intermediates market for China, its share was also sharply reduced from 35 percent in 1995 to 28 percent in 1996, while the EU became the second largest market and purchased 18 percent of China's exports. In terms of bulk commodities, Japan was the largest buyer from China (24 percent), followed by EU and Korea (20 and 15 percent, respectively). Overall, Japan bought nearly 30 percent of China's agricultural exports in 1996, Hong Kong ranked second (20 percent), followed by EU, ASEAN7, and Korea, taking 14, 8, and 7 percent, respectively.

Commodity Structure of U.S.-China Agricultural Trade

In 1996, U.S. agricultural exports to China declined 21 percent from its 1995 peak because of sharply decreased grain sales (60 percent), but still reached \$2.1 billion, much higher than 1994 (\$1.1 billion). Tables 6 and 7 present bilateral agricultural trade flows between the United States and China in 1995 and 1996. U.S. exports to China are listed in the four broad categories used earlier and also in major commodity groups, plus selected agricultural-related products, while the data on U.S. imports from China were also segregated into competitive and noncompetitive categories. The data show that although the total U.S. agricultural exports to China declined in 1996, it still had an agricultural trade surplus with China close to US\$ 1.5 billion.

U.S. exports of consumer-ready products increased by 60 percent, despite declining sales in other commodity categories. Stable trade patterns continued as shown from the

net trade data in table 6. The trade value changed significantly in the 2 years, but the United States continued to be a net exporter of bulk and semiprocessed agricultural products, while China continued to be a net exporter of horticultural and consumer-ready commodities.

Given the strong competitiveness of U.S. agriculture as a whole, the expansion of China's net exports to U.S. markets in those two groups of relatively labor-intensive food stuffs demonstrated that there is relative comparative advantage in producing different types of agricultural commodities by different countries. And, it is possible for China to increase its exports of some food products to the world market while importing other food stuffs, especially grains, during its rapid industrialization (Lu, 1996), although it may also be a reflection of China's import protection on those products to some extent.

Figure 7 depicts the structure of U.S. agricultural exports to China in 1995 and 1996. It shows that although U.S. sales of consumer-ready goods to China increased rapidly in recent years, it still accounted for less than 5 percent of U.S. farm products sold in China (its share doubled from 2.3 percent in 1995 to 4.6 percent in 1996). Bulk and semi-processed commodities still constituted more than 95 percent of U.S. agricultural exports to China. It is predictable that this structure will continue to dominate U.S. agricultural exports to China in 1997, in spite of the continuous increase of consumer-ready product exports and the fluctuation of export volumes of individual commodities.

Figure 8 describes the structure of U.S. agricultural imports from China in the last 2 years. Labor-intensive consumer-oriented products constituted nearly 60 percent of U.S. agricultural imports from China. The share of such products was increasing as U.S. agricultural imports from China expanded at a rate of about 25 percent annually. The processed intermediates were the second largest category on the U.S. import list. These were largely specialty items, such as tea, silk, essential oils, and Chinese herbs, and are generally noncompetitive with U.S. farm products. How-

Table 6--U.S.-China agricultural trade, by major category, 1995-96

	1995	1996	1995	1996	1995	1996
	Million\$US					
Total agriculture	2,632.8	2,089.6	454.8	568.8	2,177.9	1,520.8
Bulk commodities	2,029.5	1,609.3	4.0	8.8	2,025.5	1,600.5
Processed intermediates	540.2	382.0	171.4	194.5	368.8	187.5
Horticultural products	2.6	1.5	31.8	36.3	(29.2)	(34.8)
Consumer-ready products	60.5	96.8	247.7	329.3	(187.2)	(232.4)
Selected agric. related exports	1,280.4	943.8	28.1	32.9	1,252.3	910.9
Fertilizers	1,204.2	891.1	1.6	1.8	1,202.6	889.3
Agricultural chemicals	22.4	11.6	3.6	5.2	18.8	6.4
Agricultural machinery	53.9	41.1	23.0	25.9	30.9	15.2

Source: Aggregated from USDA FATUS data.

ever, the share of those traditional items is expected to decline because of the more rapid expansion of consumer-oriented commodities, such as vegetable and fruit preparations, imported from China.

The Role of China in World Agricultural Trade and U.S. Farm Exports

Figures 9 and 10 illustrate the role of China in the world agricultural commodity market by plotting its share in world agricultural exports and imports. These figures show that in aggregate terms, China only plays a moderate role in world agricultural trade, accounting for 2-3 percent of total world trade, despite the fact that its world market share increased over the past 10 years by about 1 percentage point.

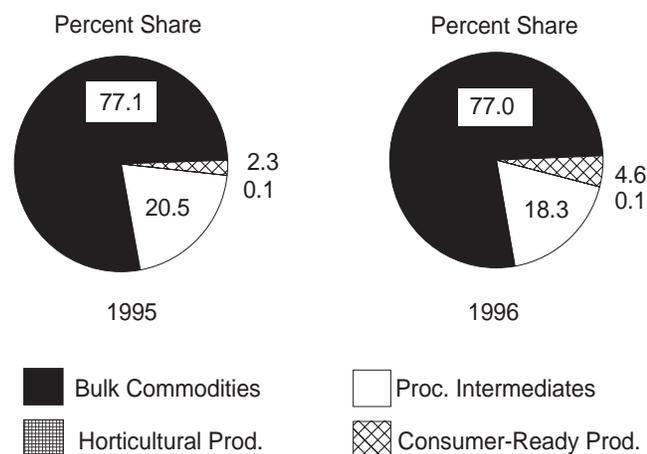
Table 7--U.S. -China agricultural trade, 1995-96

	1995	1996	% change
Million\$US			
Imports from China:			
Total ag.	479.2	596.8	24.5
Noncompetitive	128.7	154.2	19.8
Competitive	350.5	442.6	26.3
Exports from China:			
Total ag.	2,628.8	2,084.8	-20.7
Grains & feeds	1,148.4	464.5	-59.6
Cotton, inc. linters	836.7	729.6	-12.8
Oilseeds & products	410.8	651.8	58.7
Animals & products	204.1	207.4	1.6
Fruits, vegetables, & products	7.4	13.5	83.6
Sugar & related products	6.9	11.9	72.5
Other ag. products	14.7	6.1	-58.2

Source: Aggregated from USDA FATUS data.

Figure 7

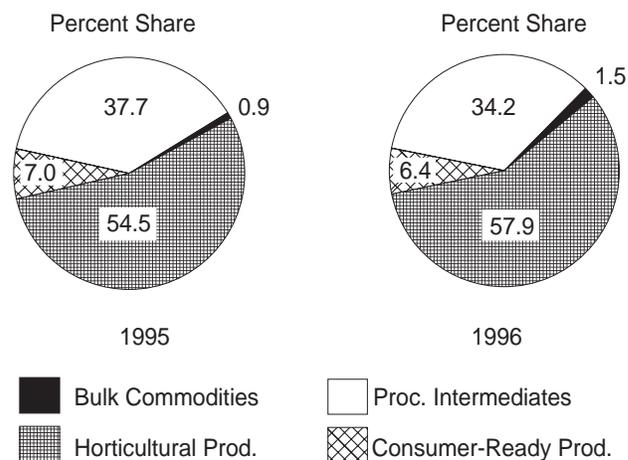
Structure of U.S. agricultural exports to China



Source: Aggregated from USDA FATUS data.

Figure 8

Structure of U.S. agricultural imports from China



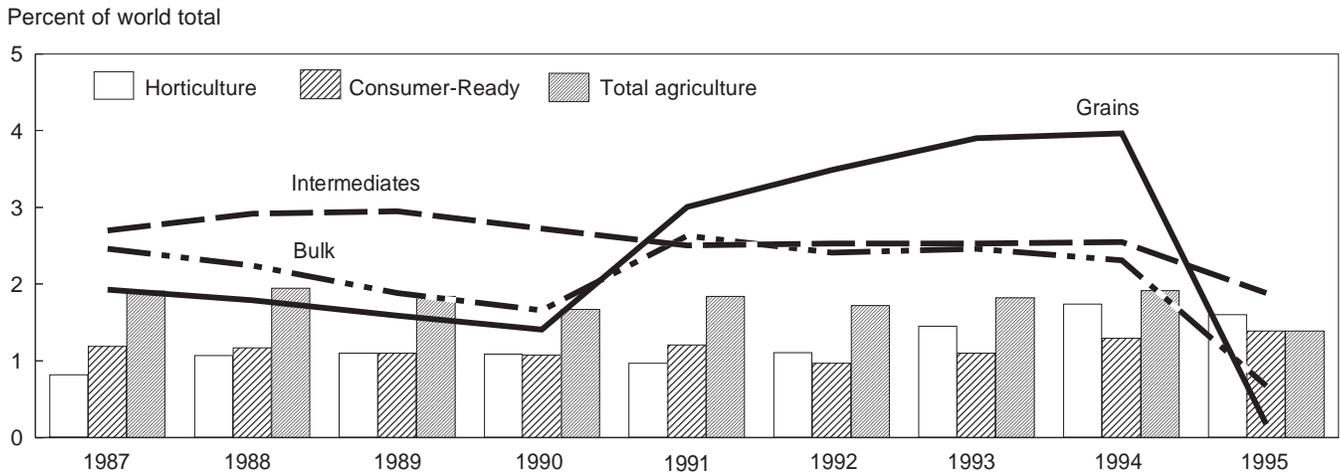
Source: Aggregated from USDA FATUS data.

At the commodity level, however, China played an important role in world bulk goods trade, especially grains. On the export side, its bulk export share was generally below 3 percent of the world market (most years less than 2 percent except 1991-1994), while its grain exports had taken nearly 4 percent of the world market in 1993 and 1994, when China was a net grain exporter. On the import side, China is a big buyer of grains in the world market, but the amount it bought fluctuated significantly from year to year. In 1995, it bought more than 8 percent of total world grain exports (in value terms).

For horticultural and consumer-ready products, China is a consistent net exporter, and its role in world imports is quite small, only absorbing less than a half percent of world imports. On the export side, China's share on the world horticulture and consumer-ready goods market are increasing steadily. However, China still was a moderate player in these two markets, only taking about 2 percent of the total world exports, in spite of the high export growth rate, especially for horticultural products. On the semi-processed intermediate commodity market, China's share in total world exports declined constantly since 1988. Its import share increased continuously since 1990 and shifted from a net exporter to a net importer in 1995, reflecting China's traditional exports such as live animals and tea, grew relatively slowly, while the imports of semiprocessed agricultural products for further processing and re-exporting increased more rapidly in recent years.

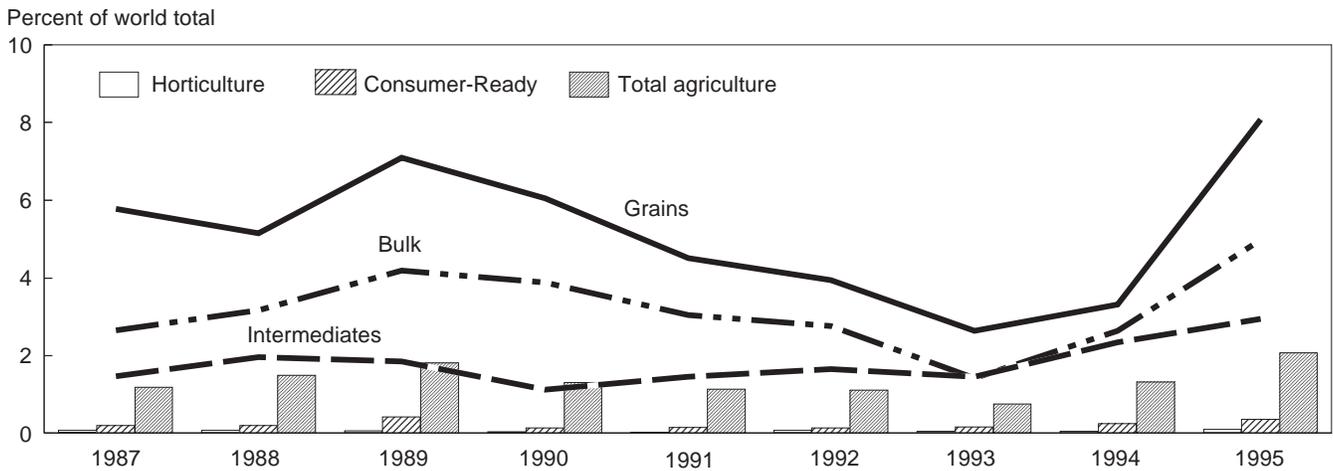
Figure 11 illustrates the role of China's market for U.S. farm exports by plotting its share in total U.S. exports of major agricultural products. China is an important buyer of U.S. bulk commodities, although it absorbed less than 5 percent of total U.S. farm exports. In 1996, for instance, it was the world's largest buyer of U.S. cotton, taking 28 percent of total U.S. exports (the second largest buyer—Japan—took 11 percent). It was also the world's third largest buyer of U.S. wheat (7 percent) and the sixth largest buyer of U.S. soybeans (6 percent). However, China is not a stable buyer of U.S. farm goods like Japan.

Figure 9
The role of China's exports in world agricultural markets



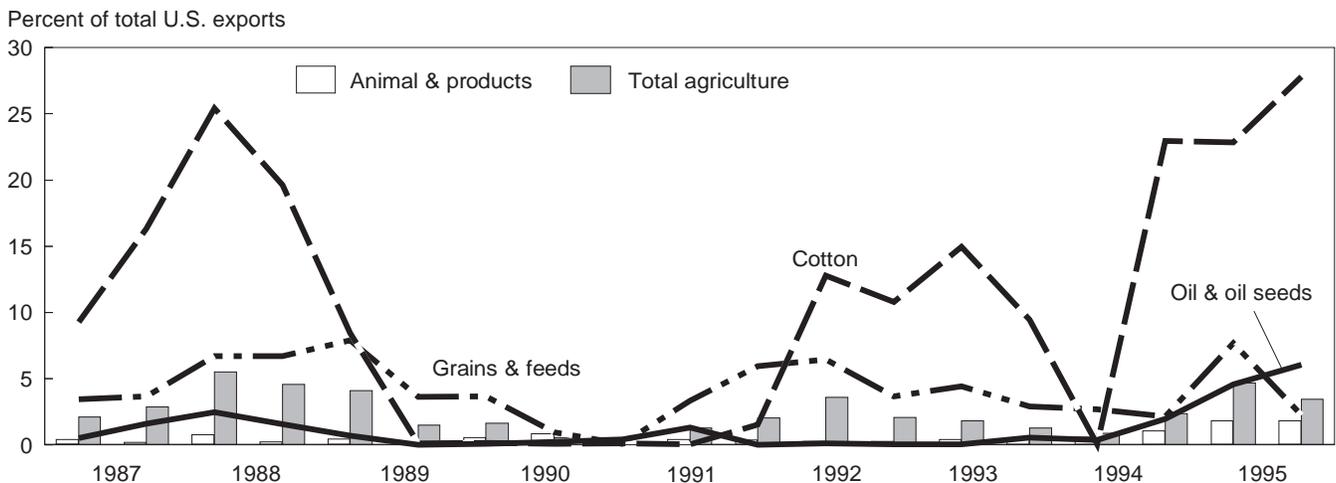
Source: Aggregated from UN COMTRADE database.

Figure 10
The role of China's imports in the world agricultural markets



Source: Aggregated from UN COMTRADE database.

Figure 11
China's share of U.S. farm exports



Source: Aggregated from USDA FATUS data.

Table 8--Foreign direct investment in China's agricultural sector, 1979-95

Year	Number of Projects			Pledged Amount (million\$US)		
	Total	Agriculture	% share	Total	Agriculture	% share
1979-88	15,997	853	5.3	28,166	906	3.2
1989	5,779	183	3.2	5,600	121	2.2
1990	7,273	223	3.1	6,596	122	1.9
1991	12,978	325	2.5	11,977	220	1.8
1992	48,764	1,017	2.1	58,124	678	1.2
1993	83,437	1,704	2.0	111,436	1,191	1.1
1994	47,549	1,046	2.2	82,680	992	1.2
1995	37,011	903	2.4	91,282	1,736	1.9
Total	258,788	6,254	2.4	395,858	5,967	1.5

Source: China Statistical Yearbook, various issues.

Its share in total U.S. exports fluctuated significantly during the past 18 years, especially for cotton and grains.

Many factors contribute to China's unstable buying behaviors, but government controls on major bulk commodity trade was one of the major causes. Import decisions are often not based on economic considerations but influenced strongly by shifting of policy regimes. The lag caused by slow information transmission under state trading may also distort trade decisions. However, as market-oriented reform and trade liberalization continue, decisions regarding exports and imports in China may become increasingly determined by the market rather than administrative fiat. China's trade behavior will continue to line up with its comparative advantages.

For example, since China imported nearly 20 million metric tons of grains in 1995, the government changed some policies and required farmers to increase the area sown to grain. However, the increased grain output and reduced imports in 1996 created a condition in which cotton and oilseed areas were reduced. China had to buy relatively more cotton, edible oils, and oilseeds from abroad. As shown in figure 11, its share in total U.S. grain exports fell from 7.7 to 2.3 percent, while its share in total U.S. cotton exports increased from 23 to 28 percent, and its share in total U.S. oilseeds exports increased from 4.6 to 6 percent. This demonstrates that fundamental economic forces eventually make their way (in some countries it may take a long time at a very high social cost), despite decisions made by governments.

Relatively Sluggish Development of FDI in China's Agricultural Sector

The growth of Foreign Direct Investment (FDI) in China has been very impressive in recent years. In 1993, China was the largest single recipient of FDI among low-income countries, absorbing \$27.5 billion, which was 14 percent of global FDI, and 68 percent of FDI flows to Asian developing countries. FDI (actually used) in China reached \$33.9 billion in 1994, \$37.8 billion in 1995, and \$42.3 billion in 1996, making China the second largest FDI recipient country in the world after the United States (DRC, 1996). However, less than 2 percent of those funds went to agricultural sectors. Table 8 presents the contracted FDI into China's agricultural sector during 1979 to 1995.

There are several features of FDI in China's agricultural sector. First, compared with other sectors, the overall scale was very small in number of projects and amount of investment (table 8), despite the agricultural sector still accounting for 20 percent GDP and 52 percent of employment. For example, agricultural projects only constituted 2.2 and 2.4 percent of total FDI projects in China in 1994 and 1995, respectively. The amount of pledged investment of those projects only accounted for 1.2 and 1.9 percent respectively, of the total pledged amount. While China's leaders often state that the agricultural sector is the foundation of their economy, in terms of investment, industrial sectors continuously receive the lion's share. There are almost no special favorable policies to encourage FDI to agriculture.

Second, consistent with the FDI flows to China, FDI in agriculture enjoyed rapid growth in recent years. The data in table 8 show that from 1991 to 1995, the contracted funds to agriculture sectors were \$4.82 billion, 4.2 times the amount pledged during the previous 12 years (1979-1990). Third, consistent with the distribution of FDI in China, the agricultural FDI is also concentrated along the coastal area. For example, Guangdong, Fujian, and Shandong accounted for more than 70 percent of those pledged investments. Fourth, FDI has become the major channel for China to use foreign funds in agriculture. Before 1990, loans were the major form of using foreign funds in agriculture, FDI only accounted for around 20 percent of foreign funds, however, the proportion of FDI increased to 63 percent from 1991 to 1995. Finally, the FDI in agriculture mainly went to food processing sectors, most of which were short- or medium-term small projects, and the investment scale was generally less than \$1 million, far below the average scale of FDI projects in China. (Ma, 1997).

Because capital is one of the most constrained factors for agricultural production in China, attracting FDI into the agricultural sector is an effective way to reduce the pressure of capital scarcity. Hence, FDI has become an important policy in China and obtained high attention from top government leaders. As the FDI policies become more favorable for agriculture, the relatively sluggish development of FDI in China's agriculture is expected to change, and food and agriculture may emerge as a new hot spot of FDI in China.

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